

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	M108621	Client:	Alaskan Copper Works
Date Received:	08/25/06	Project:	PO# M108621, F&BI 608272
Date Extracted:	08/29/06	Lab ID:	608272-01 10x
Date Analyzed:	08/29/06	Data File:	608272-01 10x.053
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	btb

Internal Standard:	% Recovery:	Lower	Upper
Germanium	74	Limit:	Limit:
		60	125

Analyte:	Concentration
	ug/L (ppb)
Chromium	631 J
Nickel	1,920
Copper	1,350
Zinc	369

J - The continuing calibration verification associated with the analyte is out of control limits.  
The reported concentration is an estimate.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Alaskan Copper Works
Date Received:	Not Applicable	Project:	PO# M108621, F&BI 608272
Date Extracted:	08/29/06	Lab ID:	I6-368 mb
Date Analyzed:	08/29/06	Data File:	I6-368 mb.045
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	btb

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	66	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	<1 J
Nickel	<1
Copper	<1
Zinc	<1

J - The continuing calibration verification associated with the analyte is out of control limits.  
The reported concentration is an estimate.

**FRIEDMAN & BRUYA, INC.****ENVIRONMENTAL CHEMISTS**

Date of Report: 09/06/06

Date Received: 08/25/06

Project: Metro Self Monitor, PO# M108621, F&amp;BI 608272

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF WATER SAMPLES  
FOR METALS BY EPA METHOD 200.8**

Laboratory Code: 608295-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	ug/L (ppb)	22.0 J	22.7 J	3	0-20
Nickel	ug/L (ppb)	14.7	14.0	5	0-20
Copper	ug/L (ppb)	79.9	81.9	2	0-20
Zinc	ug/L (ppb)	53.3	55.4	4	0-20

Laboratory Code: 608295-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Chromium	ug/L (ppb)	20	22.0	136 bJ	50-150 b
Nickel	ug/L (ppb)	20	14.7	118 b	50-150
Copper	ug/L (ppb)	20	79.9	137 b	50-150
Zinc	ug/L (ppb)	50	53.3	94 b	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	ug/L (ppb)	20	109 J	70-130
Nickel	ug/L (ppb)	20	108	70-130
Copper	ug/L (ppb)	20	110	70-130
Zinc	ug/L (ppb)	50	102	70-130

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

J - The continuing calibration verification associated with the analyte is out of control limits. The reported concentration is an estimate.



AI4

Fax # 206-382-4300

REMARKS

Rush charges authorized by:

- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes			
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS								
M 108621	01	8/25/06	10:00	H2O	1														

Samples received at 24 °C

Received by:

DATE	TIME
8/25/02	11:00
8/25/02	11:00

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D.  
Charlene Morrow, M.S.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
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September 6, 2006

**DUPLICATE INVOICE**

**INVOICE # 06ACU0906-1**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M108621, F&BI 608272 - Results of testing  
requested by Gerry Thompson for material submitted on August 25, 2006.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc by Method 200.8 @ \$80 per sample	\$ 80.00
Amount Due .....	\$ 80.00

FEDERAL TAX ID #(b) (6)

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September 6, 2006

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on August 25, 2006 from the Metro Self Monitor, PO# M108621, F&BI 608272 project. There are 3 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
ACU0906R.DOC